

# A Study to Assess the Effectiveness of Informational Booklet on Knowledge Regarding Ujjwala Yojna among Women in Selected Community Area Bhopal (M.P)

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## ABSTRACT

**Background:** With the tagline "Swachh Indhan, Behtar Jeevan", Union Government has launched a social welfare scheme "Pradhan Mantri Ujjwala Yojana" (PMUY) on 1<sup>st</sup> May 2016 under the leadership of Hon'ble Prime Minister Shri Narendra Modi. The scheme envisages of smoke free Rural India and aims to benefit five crore families especially the women living below poverty line (BPL) by providing concessional LPG connections to entire nation by 2019. The scheme will increase the usage of LPG and would help in reducing health disorders, air pollution and deforestation. **Objectives:** The study aimed to assess the effectiveness of informational booklet on knowledge regarding Ujjwala Yojna among women in selected community area Bhopal M.P. **Methods:** In the present study quantitative research approach was used to assess the effectiveness of informational booklet on knowledge regarding Ujjwala Yojna among women. The researcher adopted a pre-experimental (one group pre-test post – research design). 50 women selected for study by using Convenient sample technique. Data was collected by structured knowledge questionnaire before and after administration of self-instructional module regarding partograph and analyzed through descriptive and inferential statistics. **Results:** Indicated overall pre- test & post- test mean knowledge scores on Ujjawala Yojana. Depicted mean post- test score 24.28 is higher than mean pre- test score of 11.8. The actual gain knowledge score is 12.48 % and post- test SD =3.81 is more than pre- test SD=2.348 and computed paired t-test (28.37) ( $p= 2.18$ ) at the level of  $<0.05$ . Thus, data showed higher than the tabled value t-test (= 2.18) at the level of  $<0.05$  thus indicated significant difference and effectiveness of planned teaching program, in increasing the knowledge of women regarding Ujjawala Yojana. **Hence  $H_1$  is accepted.**

**KEYWORDS:** Effectiveness, information booklet, knowledge

## INTRODUCTION

### Background of the study:

Ministry of Petroleum & Natural Gas is implementing the scheme. Total budget allocation of Rs. 8000 crore has been made by the Government for implementation of the scheme over three years starting from FY 2016-17. The Government has already assigned Rs. 2000 crore for implementation of PMUY 2016-2017. Government will distribute

LPG connections to about 1.5 crore BPL families within the current financial year.

The scheme will be implemented using the money saved in LPG subsidy through the "Give-it-Up" campaign. The Indian Government has so far saved nearly Rs. 5,000 crore in LPG subsidy. Since the launch of "Give-it-Up" campaign, 1.13 crore people

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have given-up subsidies and are buying LPG cylinders at market price. *In India, cooking is one of the chores that capture most of the time in women's day to day life. Women in rural India do not get time to look beyond these chores and hardly get time for some other productive work. According to Census, 2011, nearly 121 million families in India are still cooking food using traditional fuels. In India, around 40 percent of households still deprived of clean energy for cooking food. Recognizing such facts, Pradhan Mantri Ujjwala Yojana (PMUY) launched by Hon'ble Prime Minister Narendra Modi in May 2016. This scheme aims to provide a clean energy fuel of Liquefied Petroleum Gas (LPG) to 80 million rural women in India who belong below the poverty line family. The present study attempted to analyze the impact of the PMUY scheme on the socio-economic status of women in the rural sector in India and thereby assess the effectiveness of Yojana on women empowerment in the rural sector. The objectives of PMUY, namely, sustainability, energy affordability, efficiency, safety, and clean environment, selected as dependent variables in the study. The socio-economic factors of women empowerment, namely, accessibility, executive power, awareness, financial independence, and behavioural change in herself, chose as independent variables in the study. The present study is a survey-based approach and survey responses obtained from 187 women living in the rural sector in India. The Correlation, regression, and ANOVA statistical tools applied for analysis. The study's findings showed that all the dimensions of PMUY significantly influence the socio-economic aspects of women empowerment. The study also proposed a new conceptual model that may assist the government in framing new policies and strategies to enhance the effectiveness of PMUY in India.* **IN 2021**, Many people from all over UP and other states has migrated from village to city or to other states for work. There they face the problem of address proof. Ujjwala 2.0 scheme will give maximum benefit to lakhs of such families. Now these workers from other places need not run from pillar to post for address proof. Government has full faith in the honesty of the migrant workers. All one has to do is give a self-declaration of the address for getting a gas connection under Ujjwala 2.0.

**IN 2021 UJJWALA 2.0 BENEFITS**, along with a deposit free LPG connection, Ujjwala 2.0 will provide first refill and hotplate free of cost to the beneficiaries. Also, the enrollment procedure will require minimum paperwork. In Ujjwala 2.0, migrants will not be required to submit ration cards or address proof. A self-declaration for both 'family declaration' and as a 'proof of address' will suffice.

Ujjwala 2.0 will help achieve the Prime Minister's vision of universal access to LPG.

**IN 2021 PRADHAN MANTRI UJJWALA YOJANA 2021, Pradhan Mantri Ujjwala Yojana** was aimed at providing 8 Crore LPG connections in the name of women in BPL (Below Poverty Line) households across the country. The government has achieved a target of 8 Crore LPG connections and have been distributed to the BPL households across the country under the scheme. Some of the objectives of the scheme are-

- Empowering women and protecting their health.
- Reducing the serious health hazards associated with cooking based on fossil fuel.
- Reducing the number of deaths in India due to unclean cooking fuel.
- Preventing young children from significant number of acute respiratory illnesses caused due to indoor air pollution by burning the fossil fuel.

#### **Need for study:**

**IN 2021 ACCORDING TO WHO**, In India, the poor have limited access to cooking gas (LPG). The spread of LPG cylinders has been predominantly in the urban and semi-urban areas with the coverage mostly in middle class and affluent households. But there are serious health hazards associated with cooking based on fossil fuels. According to WHO estimates, about 5 lakh deaths in India alone due to unclean cooking fuels. Most of these premature deaths were due to non-communicable diseases such as heart disease, stroke, chronic obstructive pulmonary disease and lung cancer. Indoor air pollution is also responsible for a significant number of acute respiratory illnesses in young children. According to experts, having an open fire in the kitchen is like burning 400 cigarettes an hour.

Providing LPG connections to BPL households will ensure universal coverage of cooking gas in the country. This measure will empower women and protect their health. It will reduce drudgery and the time spent on cooking. It will also provide employment for rural youth in the supply chain of cooking gas.

#### **PROBLEM STATEMENT:**

"A Study to Assess the Effectiveness of Informational Booklet on Knowledge Regarding Ujjwala Yojna among Women in Selected Community Area Bhopal M.P."

#### **OBJECTIVES:**

- To assess the pretest knowledge regarding UjjwalaYojna among women.
- To evaluate the effectiveness of informational booklet on knowledge regarding UjjwalaYojna.

- To find out association between the pre-test knowledge score of women regarding Ujjwala Yojna with their selected demographic variables.

#### **HYPOTHESIS:**

**H<sub>1</sub>:** -There is a significant difference between pre-test and post-test knowledge regarding Ujjawala Yojana among women.

**H<sub>2</sub>:** -There is a significant association between pretest knowledge of women with their selected demographic variables.

#### **OPERATIONAL DEFINITIONS:**

**ASSESS-** evaluate or estimate the nature, ability or quality of something.

**EFFECTIVENESS-** effectiveness means how efficiently an operation or activity is at achieving its goal and the overall objective.

**INFORMATIONAL BOOKLED-**A informational booklet is a small, thin book that has a paper cover and gives you information about something.

**KNOWLEDGE-**Knowledge is the familiarity, awareness or understanding of someone or something, such as facts, information, description or skills.

**UJJAWALA YOJANA-**Ujjawala Yojana is a flagship scheme of the Indian government's policy which aims to provide free LPG cylinder.

**WOMEN-**in this study a woman is a sample by selected the researcher in this study.

**COMMUNITY AREA-**community is all the people living in an area or a group or groups of people who share common interest.

#### **MATERIAL AND METHODS:**

##### **Research approach:**

*Quantitative research approach*

##### **Research design:**

*Pre-experimental one group pre-test post-test design.*

##### **Variables:**

**Independent Variable:** *In the present study the independent variable is informational booklet regarding Ujjawala Yojana.*

**Dependent Variable:** *In the present study the dependent variable refers to knowledge of womens regarding Ujjawala Yojana in selected Gandhi Nagar Bhopal.*

**Demographic Variables:** *In this study demographic variable were age, religion, types of family, education, occupation, family income, source of information.*

#### **Research setting:**

The study was conducted in Gandhi Nagar community area, Bhopal.

**Population:** *In this study population consisted of Women in selected community area of Bhopal.*

**Sample:** 50 women in Gandhi Nagar Bhopal.

**Sample size:** 50 Women

#### **Sample techniques:**

Convenient sample technique

#### **Criteria for sample selection:**

##### **Inclusion criteria:**

- Women's who are available at the time of study
- Women's who are willing to participate in study.
- Women's who are who are living in particular area.
- Women's who are able to read & understand either English or Hindi language.

##### **Exclusion criteria:**

- Women's who are not present at the time of study.
- Women's who are not interested to participate in the study.

#### **Tool and method of data collection:**

##### **DEVELOPMENT OF TOOL**

After an extensive review of literature, discussion with the guide; the various experts in the field of nursing and based on the investigator's personal experience the self-structured interview schedule on knowledge regarding Ujjawala Yojana was developed.

##### **DESCRIPTION OF THE TOOL**

Self-Structured Interview Schedule was used to assess the knowledge regarding Ujjawala Yojana.

It consists of two parts: Section A and Section B

**Section A:** It deals with the items on demographic variables like age, religion, types of family, education, occupation, family income, source of information.

**Section B:** It consist of 10 items from deals with each item on knowledge regarding basic concept of Pradhan Mantri Ujjawala Yojana. Eligibility criteria of Ujjawala Yojana, strategies and benefit of Ujjawala Yojana.

##### **SCORING KEY:**

Scoring key is not prepared for Part-I by coding the demographic variables. For Part-II score '1' and '0' are awarded to correct and wrong response. Thus, the maximum score is 30 and minimum score is 00. To interpret the level of knowledge the scores is classified as follows:



**Poor** - 0-10

**Average** - 11-20

**Good** - 21-30

#### Development of information booklet-

The first draft of the informational booklet on knowledge regarding Ujjawala Yojana was based on the objectives of the study and was given to experts in the field of nursing along with objectives and criteria rating scale. Based on their suggestions and recommendations (correction of certain items), the final draft of the informational booklet was prepared. Informational booklet incorporates the following components:

1. Introduce the topic.
2. Define the benefits.
3. List down the eligibility criteria.
4. How to registered in PMUY yojana.

**Reliability of tool:** The test-retest correlation coefficient was computed and it was found to be 0.87 which indicates that the tool is reliable. Cronbach alpha was also computed using split half methods (employing Brown's Prophecy formula) and it was found to be 0.83.

#### Data collection procedure:-

- Formal permission for data collection was obtained from The Block Medical Officer community health centre Bhopal.
- Permission was also obtained from Principal, RD Memorial College of Nursing, Bhopal.
- The investigator gave self-introduction and explained the purpose of the study, the subject's

willingness to participate in the study was ascertained.

- The subjects are assured anonymity and confidentiality of the information provided by them and written informed consent was obtained.
- On the 1<sup>st</sup> day pre-test was conducted by administering the Structured Interview schedule. The same day taught through plan teaching program. On the 7<sup>th</sup> day post test was conducted by using the same tool.
- Each subject took approx 30 Minutes to complete the Structured questionnaire. Period of data collection was from 01/06/2021 to 30/06/2021

#### Ethical consideration:

The study was accepted by the research committee and prior permission to conduct the study was obtained from Principal of RD Memorial College of Nursing, Bhopal, (M.P).

Permission was taken from Dr. A. Patel (BMO) community health center Bhopal, (M.P.) Permission was also taken from Ujjawala Yojana who form the sample group they had the freedom to withdraw from the study at any time without giving any reason.

#### Plan for data analysis:

The plan for data analysis includes-

- Descriptive and Inferential statistics was used for analysis of data and the significant difference between the pre and post-test knowledge scores.
- Chi-square test was used to determine the association between the pre-test knowledge score with selected demographic variables. 't' test was used to find out the differences in mean pre-test and post-test knowledge scores.

## RESULTS:

**Table 1: - frequency and percentage distribution of Socio- demographic variable**

**N=50**

S.NO.	DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE %
1	<b>Age in years</b>		
	a) 18- 28 years	18	36%
	b) 29-39 years	10	20%
	c) 40-59 years	10	20%
	d) above 60 years	12	24%
2	<b>Religion</b>		
	a) Hindu	12	24%
	b) Muslim	17	34%
	c) Christian	13	26%
	d) Others	8	16%
3	<b>Educational status of women's</b>		
	a) No formal education	15	30%
	b) Primary education	16	32%
	c) Higher secondary education	11	22%
	d) Graduate	8	16%

4	<b>Occupation</b>		
	a) daily wage	12	24%
	b) worker	24	48%
	c) private job	8	16%
5	<b>Family income</b>		
	a) Below Rs 3000	16	32%
	b) Rs 3001 – Rs 6000	7	14%
	c) Rs 6001 – Rs 10000	17	34%
6	<b>Type of family</b>		
	a) Nuclear family	22	44%
	b) Joint family	14	28%
7	<b>Sources of information</b>		
	a) Family	5	10%
	b) Friends	12	24%
	c) Health care professionals	17	34%
	d) Media	16	32%

**Table 1:** Described about the frequency, percentage distribution of socio demographic variable. Distribution of the subject by age revealed that majority (36%) of them belongs to 18-28 years, (20%) of the women were belongs to age group of 29-39 years, and (20%) of the women's were belongs to age group of 40-59 years, (24%) of the women's were belongs to age group of above 60 years. With regards to the religion majority (34%) of them had Muslim, (24%) of women's had Hindu, whereas, (26%) of the women's had Christian and only (16%) of the women's had others. With regards to the educational status of women's majority (32%) of women's had no primary education, (30%) of women's had no formal education, (22%) of them to higher secondary education, (16%) of them graduate. According to the occupation majority (48%) of women's had worker, (24%) of women's of had daily wages, (16%) of them to private job, (12%) of them farmer. With regards to the family income majority of women's (34%) has belong to Rs 6001-10000, (32%) has below Rs 3000, (14%) were belonging to Rs 3001-6000, (20%) were belong to above 10000. With regards to the type of family majority of women's (44%) were nuclear family, (28%) is joint family, (28%), is extended family. With regards to the source of information majority of women's (34%), were health care professions, (10%) were family, (24%) were friend, (32%) were media.

#### ANALYSIS OF PRE-TEST & POST-TEST LEVEL OF KNOWLEDGE OF WOMENS REGARDING UJJAWALA YOJANA IN SELECTED AREAS OF BHOPAL (M.P.)

**Table No: 2-** Frequency and percentage wise distribution of women based on pre- test level of knowledge score on Ujjawala Yojana in selected areas of Bhopal. (M. P.)

N= 50

S. No	Category	Range	Frequency	Percentage	Mean	Mean %	SD
1	Good	21-30	0	0%	11.8	39.33%	2.348
2	Average	11-20	18	36%			
3	Poor	0-10	32	64%			

**Table 2:** Shows the frequency and percentage wise distribution of pre- test level of knowledge of women's regarding Ujjawala Yojana in selected areas of Bhopal (M.P.). The level of knowledge was seen in to 3 categories, such as poor, average and good knowledge. In pre-test majority 64% of the women had poor knowledge whereas 00% of them had good knowledge, 36% of them had average knowledge regarding Ujjawala Yojana. The pre- tests mean score 11.8, SD was 2.348 and mean percentages 39.33%.

**Table 3: - Frequency and percentage wise distribution of post- test knowledge score of women’s regarding Ujjawala Yojana at selected area of Bhopal (M.P.)**

**N= 50**

S. No	Category	Range	Frequency	Percentage	Mean	Mean %	SD
1	Good	21-30	37	74%	24.28	80.93%	3.81
2	Average	11-20	13	26%			
3	Poor	0-10	0	0%			

**Table 3-** shows the frequency and percentage wise distribution of post- test level of knowledge of women’s regarding Ujjawala Yojana in selected areas of Bhopal (M.P.). The level of knowledge was seen in to 3 categories, such as poor, average and good knowledge. In pre-test majority 74% of the women had good knowledge whereas 00% of them had poor knowledge, 26% of them had average knowledge regarding Ujjawala Yojana. The pre- tests mean score 24.28, SD was 3.81 and mean percentages 80.93%.

**Table No: 4- Description of Mean, Mean %, SD of Pre and post -Test Knowledge Scores on women.**

**N= 50**

S.NO.	Description	Mean	Mean %	SD	t-test	DF	P-value
1	Pre-test knowledge	11.8	39.33%	2.348	28.37	99	0.05 (2.18)
2	Post-test knowledge	24.28	80.93%	3.81			

P < 0.05\*      P < 0.01\*\*      N = 60      \*\*P < 0.05\*      S\* = Significant

**Table No: 4-** Indicated overall pre- test & post- test mean knowledge scores on Ujjawala Yojana. Depicted mean post- test score 24.28 is higher than mean pre- test score of 11.8. The actual gain knowledge score is 12.48 % and post- test SD =3.81 is more than pre- test SD=2.348 and computed paired t-test (28.37) (p= 2.18) at the level of <0.05. Thus, data showed higher than the tabled value t-test (= 2.18) at the level of <0.05 thus indicated significant difference and effectiveness of planned teaching program, in increasing the knowledge of women regarding Ujjawala Yojana. **Hence H<sub>1</sub> is accepted**

**CHI- SQUARE TEST ANALYSIS TO FIND THE ASSOCIATION BETWEEN THE PRE- TEST KNOWLEDGE SCORE & DEMOGRAPHIC VARIABLES**

**Table No: 5-Chi-square Test Showing the Association between Pre-Test Knowledge Score of women with their selected socio- demographic variables.**

**N=50**

S. NO.	CHARACTERSTICS	Knowledge level				DF	Chi square value	Chi value	Inferences
		Good	Average	Poor	Total			Critical value p>0.05	
1	<b>Age in year</b>					4	8.978	0.05 (9.49)	NS
	18- 28 years	0	3	15	18				
	29-39 years	0	0	10	10				
	40-59 years	0	10	0	10				
	Above 60 years	0	5	7	12				
2	<b>Religion</b>					6	26.3042	0.05 (12.59)	S
	Hindu	0	7	5	12				
	Muslim	0	10	7	17				
	Christian	0	1	12	13				
	Others	0	0	8	8				
3	<b>Educational status of the mother</b>					6	18.2801	0.05 (12.59)	S
	No formal education	0	3	12	15				
	Primary education	0	10	6	16				
	Higher secondary	0	2	9	11				
	Graduate	0	3	5	8				
7	<b>Occupation</b>					6	8.8121	0.05 (12.59)	NS
	Daily wage	0	4	8	12				
	Worker	0	4	20	24				
	Private job	0	4	4	8				
	Farmer	0	6	0	6				

5	<b>Monthly income of the family</b>					6	25.3111	0.05 (12.59)	S
	Below Rs 3000	0	2	14	16				
	Rs 3001 – Rs 6000	0	1	6	7				
	Rs 6001 – Rs 10000	0	8	9	17				
	Above Rs 10000	0	7	3	10				
6	<b>Type of the family</b>					4	2.5973	0.05 (9.49)	NS
	Nuclear family	0	6	16	22				
	Joint family	0	6	8	14				
	Extended family	0	6	8	14				
7	<b>Source of information-</b>					6	3.6732	0.05 (12.59)	NS
	Family	0	2	3	5				
	Friends	0	3	9	12				
	Health care professionals	0	7	10	17				
	Media	0	6	10	16				

DF: - 2=5.99, 4=9.49, 6=12.59, NS= Not significant, S\*= Significant

**Table 5-** Chi- Square test analysis to find out the significant association of pre- test knowledge score with Socio-demographic variables like religion as the ( $\chi^2= 26.3042$  and table value 12.59), Educational status of women as the ( $\chi^2= 18.2801$  and table value 12.59), Monthly income of the family as the ( $\chi^2= 25.3111$  and table value 12.59).

Chi- Square test analysis to find out the non-significant association of pre- test knowledge score with Socio-demographic variables like, Age as the ( $\chi^2= 8.978$  and table value 12.59), types of family as the ( $\chi^2= 2.5973$  and table value 9.49), source of information as the ( $\chi^2= 3.6732$  and table value 12.59). Occupation as the ( $\chi^2= 8.8121$  and table value 12.59).

Hence it can be interpreted that percentage knowledge score related to socio- demographic variables where only by chance and not true difference and hence **H<sub>2</sub> research hypothesis was not accepted.**

## DISCUSSION:

### Analysis of pre-test and post- test knowledge scores of the women.

Indicated overall pre- test & post- test mean knowledge scores on Ujjawala Yojana. Depicted mean post- test score 24.28 is higher than mean pre- test score of 11.8. The actual gain knowledge score is 12.48 % and post- test SD =3.81 is more than pre- test SD=2.348 and computed paired t-test (28.37) ( $p= 2.18$ ) at the level of <0.05. The computed 't' value ( $t=28.37$ ) was higher than the table value ( $t=2.18$ ) at 0.05 level of significance. Hence, the research **hypothesis (H<sub>1</sub>) was accepted.** This indicates that the Informational Booklet was effective in increasing the knowledge scores of the women's regarding Ujjawala Yojana

### Chi- square test analysis to find the association between the pre- test knowledge score & demographic variables

Chi- Square test analysis to find out the non-significant association of pre- test knowledge score with Socio-demographic variables like, Age as the ( $\chi^2= 8.978$  and table value 12.59), types of family as the ( $\chi^2= 2.5973$  and table value 9.49), source of information as the ( $\chi^2= 3.6732$  and table value 12.59). Occupation as the ( $\chi^2= 8.8121$  and table value 12.59).

Hence it can be interpreted that percentage knowledge score related to socio- demographic variables where only by chance and not true difference and hence **H<sub>2</sub> research hypothesis was not accepted.**

## Conclusion:

The aim of this study was to the effectiveness of informational booklet on knowledge regarding Ujjawala Yojna among women in selected community area Bhopal M.P. The findings of the existing paper, consequently, have significant suggestions for fine alteration of strategies and establishments towards encouraging socially comprehensive cleaner energy shift among women in rural India. The outcomes recommended that enabling larger adoption of LPG, particularly in respect of its consistent use,

necessitates the emphasis on enhancing domestic awareness about the benefits of LPG and the disadvantages of traditional fuels. Such changes need to be made at a fast pace because the success of the initiative of a shift towards cleaner energy necessitates its social acceptance.

## Recommendations:

- The study can be a replicated on a large sample with a control group.
- Similar study can be under taken using other teaching strategies.



- Similar study can be conducted using larger number of samples.

**Conflict of interest:** No

**Financial support:** Self

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